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EXAMINER

VERDIER, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/647,391	Applicant(s) LI ET AL.	
	Examiner Christopher Verdier	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8-26-03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicants' amendment dated December 28, 2005 has been carefully considered but is non-persuasive. Claims 3-4 are pending. The specification has been amended to correct most of the informalities therein. However, the new abstract and the specification contain informalities as set forth later below. The correction of the above matters is noted with appreciation.

With regard to Applicants' argument that Horng 6,561,762 does not teach that each of the plurality of guiding ribs has a cross section having two inclined flat surfaces located on opposing sides thereof, with the two inclined flat surfaces having first ends spaced apart a first distance that is less than a second distance between second ends thereof, with the first ends of the two inclined flat surfaces being located between the fan blade and the second ends of the two inclined flat surfaces, with each of the plurality of guiding ribs being curved along a length thereof in a direction corresponding to a direction of air blown from the fan, the examiner respectfully disagrees. Figure 6 of Horng discloses that each of the plurality of guiding ribs 2 has a cross section having two inclined flat surfaces, which are surface 22 and surface 21. Column 2, lines 40-42 state that the air guide face 21 may be formed with the shape of an inclined face or a circular plane, which connotes that the face 21 is formed as a flat surface. The flat surfaces are located on opposing sides thereof, with the two inclined flat surfaces having unnumbered first ends (nearest to the impeller 41) spaced apart a first distance that is less than a second distance between unnumbered second ends thereof (near 23), with the first ends of the two inclined flat surfaces being located between the fan blade and the second ends of the two inclined flat surfaces, with each of the plurality of guiding ribs being curved along a length

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thereof in a direction corresponding to a direction of air blown from the fan (see column 3, lines 1-7 and figure 8). With regard to Applicants' argument that Horng does not teach that the first ends of the two inclined flat surfaces are closer to a center of the frame body than the second ends of the two inclined flat surfaces, the examiner disagrees. As seen in figure 6, the first ends of the two inclined flat surfaces are closer to a center near 3, 41 of the frame body than the second ends of the two inclined flat surfaces.

With regard to Applicants' argument that Grignon 4,482,302 does not teach the plurality of guiding ribs are curved along a length thereof in a direction corresponding to a direction of air blown from the fan, this is correct. However, this feature is well known as disclosed by Horng '762, as well as Hopfensperger and Kamada. Applicants' argument that Grignon does not disclose that the first ends of the two inclined flat surfaces are closer to a center of the frame body than the second ends of the two inclined flat surfaces is not persuasive. As seen in figure 6 of Grignon, the first ends of the two inclined flat surfaces of the guiding ribs 102 are closer to a center near 104 of the frame body than the second ends of the two inclined flat surfaces. Note that in figure 6, which corresponds to figures 1-2 and 4 of Grignon, the support arms 2 are of a cross section having two inclined flat surfaces. See column 3, lines 19-22. The flat surfaces are located on opposing sides thereof, with the two inclined flat surfaces having unnumbered first ends (nearest to the impeller 107) spaced apart a first distance that is less than a second distance between unnumbered second ends thereof, with the first ends of the two inclined flat surfaces being located between the fan blade and the second ends of the two inclined flat surfaces.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Taiwan on July 2, 2003. It is noted, however, that applicant has not filed a certified copy of the Taiwanese application as required by 35 U.S.C. 119(b).

Specification

The disclosure is objected to because the specification contains numerous references to a vent (page 3, third to last line and page 7, line 2, for example), which is unclear as to which element of the fan this is, because it appears to be the same element as the hole 11.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claim 3, lines 7-8, which recite the guiding ribs having a cross section having two inclined flat surfaces located on opposing sides, has no antecedent basis in the specification.

Claim 3, lines 8-11, which recite that the two inclined flat surfaces have first ends spaced apart a first distance that is less than a second distance between second ends, with the first ends of the two inclined flat surfaces being located between the fan blade and the second ends of the two inclined flat surfaces, has no antecedent basis in the specification.

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Claim 4, lines 1-3, which recite that the first ends of the two inclined flat surfaces are closer to a center of the frame body than the second ends of the two inclined flat surfaces, has no antecedent basis in the specification.

The abstract of the disclosure is objected to because line 1 refers to a vent, which is unclear as to which element of the fan this is, because it appears to be the same element as the hole 11, because in line 2, "connecting" should be changed to -- connected to a --, because in line 3, "with outside extension" is non-idiomatic, and because lines 6-7 make reference to the prior art, which is objectionable and should be deleted. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 3, line 8, "thereof" is indefinite in that it is unclear if this refers to the guiding ribs, the cross section, or the inclined flat surfaces. In claim 3, line 10, "thereof" is indefinite in that it is unclear if this refers to the guiding ribs, the cross section, or the inclined flat surfaces.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 3-4, as far as they are definite and understood, are rejected under 35

U.S.C. 102(e) as being anticipated by Horng 6,561,762 (figure 6). Note the fan comprising a frame body 1 having an unnumbered hole, an unnumbered supporting part having a pivot 3 and a plurality of guiding ribs 2, the supporting part being connected to the frame body by the plurality of guiding ribs, and a fan blade (not numbered, connected to impeller 41) connected to the pivot, wherein each of the plurality of guiding ribs has a cross section having two inclined flat surfaces 22 and 21. Column 2, lines 40-42 state that the air guide face 21 may be formed with the shape of an inclined face or a circular plane, which connotes that the face 21 is formed as a flat surface. The flat surfaces are located on opposing sides thereof, the two inclined flat surfaces having unnumbered first ends (nearest to the impeller 41) spaced apart a first distance that is less than a second distance between unnumbered second ends thereof (near 23), the first ends of the two inclined flat surfaces being located between the fan blade and the second ends of the two inclined flat surfaces, wherein each of the plurality of guiding ribs are curved along a length thereof in a direction corresponding to a direction of air blown from the fan (see column 3, lines 1-7 and

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figure 8). As seen in figure 6, the first ends of the two inclined flat surfaces are closer to a center near 3, 41 of the frame body than the second ends of the two inclined flat surfaces.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3-4, as far as they are definite and understood, are also rejected under 35 U.S.C. 103(a) as being unpatentable over Grignon 4,482,302 in view of either (Hopfensperger 4,761,115 or Kamada 6,503,060). Grignon (figure 6) discloses a fan substantially as claimed, comprising a frame body 101 having a hole 109, an unnumbered supporting part having a pivot (unnumbered, corresponding to 3 in figure 1) and a plurality of guiding ribs 102, the supporting part being connected to the frame body by the plurality of guiding ribs, and a fan blade (not numbered,

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connected to impeller 107) connected to the pivot, wherein each of the plurality of guiding ribs has a cross section having two inclined flat surfaces. In figure 6, which corresponds to figures 1-2 and 4 of Grignon, the support arms 102 are of a cross section having two inclined flat surfaces, as shown by the triangular cross section in figure 4. See column 3, lines 19-22. Note that the embodiment of figure 6 is the embodiment of figures 1-2 and 4, turned over. See column 5, lines 47-51. The flat surfaces are located on opposing sides thereof, the two inclined flat surfaces having unnumbered first ends (nearest to the impeller 107) spaced apart a first distance that is less than a second distance between unnumbered second ends thereof (near 102 in figure 6), the first ends of the two inclined flat surfaces being located between the fan blade and the second ends of the two inclined flat surfaces. As seen in figure 6, the first ends of the two inclined flat surfaces are closer to a center near 104 of the frame body than the second ends of the two inclined flat surfaces.

However, Grignon does not disclose that each of the plurality of guiding ribs are curved along a length thereof in a direction corresponding to a direction of air blown from the fan.

Hopfensperger (figure 2) shows a fan 4 having plural guiding ribs 2a, 2b that are curved along a length thereof in a direction corresponding to a direction of air blown from the fan, located at the outlet of the fan, for the purpose of reducing noise.

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Kamada (figure 3) shows a fan 6 having plural guiding ribs 41 that are curved along a length thereof in a direction corresponding to a direction of air blown from the fan, located at the outlet of the fan, for the purpose of reducing pressure loss or noise resulting from vortexes.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the fan in figure 6 of Grignon such that each of the plurality of guiding ribs are curved along a length thereof in a direction corresponding to a direction of air blown from the fan, as taught by either Hopfensperger or Kamada, for the respective purposes of reducing noise, and reducing pressure loss or noise resulting from vortexes.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.
March 22, 2006



Christopher Verdier
Primary Examiner
Art Unit 3745